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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,542	07/16/2004	Shuhei Ikeda	XA-10142	8452

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MILES & STOCKBRIDGE PC
1751 PINNACLE DRIVE
SUITE 500
MCLEAN, VA 22102-3833

EXAMINER

GOODEN JR, BARRY J

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/501,542

Applicant(s)

IKEDA ET AL.

Examiner

Barry J. Gooden Jr.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Preliminary Amendment 16 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/8/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

At page 2 "an improvement characterized by" should be removed from the claim. Claim language should not contain purported merits.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, and 7, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese reference 2001-347,953 A.

In regards to claims 1-4 and 7, Japanese reference 2001-347,953 A shows a steering apparatus for supporting a steering shaft (1) to which a steering wheel is attached so that the steering shaft (1) is displaceable in an axis-direction, the steering apparatus comprising:

an inner column (3) for supporting the steering shaft (1) rotatably;

a pair of brackets (6) fitted to a car body and disposed in positions facing each other with respect to an axis of the steering shaft (1);

a tension member (4, integral to the outer column) extending between the pair of brackets (6);

two pieces of fixing members (a bolt (13) and nut (15), see Figure 9) for fixing the tension member (4) from outside of the pair of brackets (6);

a displacement causing member (15, 17, and 18, see Figure 9), disposed between the tension member (4) and the fixing member (13), for causing a relative displacement between the pair of brackets (6);

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an outer column (4) held on the car body through a connection (See Figure 13) between the tension member (4), the brackets (6) and the fixing members (13, 15);

the outer column (4) having a pressing portion (if pressure is applied to the outer column (4), it has a pressing portion) of which an outer periphery is brought into contact with both of the pair of brackets due to the relative displacement of the brackets between at least the pair of brackets (See Figure 14);

the outer column (4) having an inner peripheral surface embracing an outer periphery of the inner column (See Figure 14);

wherein the pair of brackets (6) interlocking with the tension member (4) get closer to each other due to the displacement caused by the displacement causing member (15, 17, and 18), a pressing force is thereby applied to the inner column (3) via the pressing portion of the outer column (4), the inner column (3) maintains its axis-directional position with respect to the brackets (6) through the outer column (4);

wherein an axis of said steering shaft (1) substantially intersects a line that connects centers of said two fixing members (13, 15);

wherein the pair of brackets (6) is formed with tilt grooves (5);

wherein said outer column (4) includes an integrally-formed car body fitting portion (8, See Figure 18); and

wherein said tension member (4) is disposed outwardly in the radial direction from the inner column (3) (See Figure 14).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Reference 2001-347953 A in view of Higashino, US Patent 5,605,351.

The Japanese Reference shows all of the claimed elements including the outer column (4) being formed with a protruded portion (See Figure 14) extending inwards in a radial direction and engaging an outer surface of the inner column (3), and excluding a part of the inner column being formed with at least one elongate hole extending in an axis-direction, and the outer column engaging with the elongate hole.

Higashino teaches an inner column (2) being formed with at least one elongate hole (14) extending in an axis-direction, and a member (17) engaging with the elongate hole (14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the inner column of the Japanese Reference in view of the teachings of Higashino to include an elongated hole that the outer column engages so as to provide a more secure method of engagement between the outer and inner columns.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Reference 2001-347953 A in view of Koellisch et al., US Patent 6,357,318 B1.

The Japanese Reference shows all of the claimed elements except a tension member being constructed of a plurality of parts.

Koellisch et al. teach a tension member (32, 34) being constructed of a plurality of parts (two separate parts) that can be divided so as to form an annular configuration embracing a column (24).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tension member of the Japanese Reference in view of the teachings of Koellisch et al. to include being constructed of a plurality of parts so as to facilitate ease of installation.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry J. Gooden Jr. whose telephone number is (571) 272-5135. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barry J Gooden Jr.
Examiner
Art Unit 3616

BJG

 12/19/05
PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600